

IN THE CLAIMS:

This listing of the claims will replace all prior versions and listings of the claims.

Listing of Claims:

1. (Currently amended) A method for isolating a biopolymer-nucleic acid from an aqueous solution utilizing magnetic particles comprising the steps of:
 - a) adding silica-coated magnetic particles to an aqueous solution comprising the biopolymer-of-interest-nucleic acid in the presence of a salt and an hydratable additive, which is selected from the group consisting of ethylene glycol, tetraethylene glycol, polyalkylene glycol, cyclodextrin, carageenan, dextran, dextran sulfate, xanthan, cellulose, hydroxypropyl cellulose, amylase, 2-hydroxypropyl- β -cyclodextrin, Agar Agar or a mixture thereof, wherein the concentration of the additive is in the range of from 2% (w/v) to 7% (w/v) and wherein the concentration of the salt is sufficiently high to cause the nucleic acid to adhere to the particles but not so high as to substantially denature or degrade the nucleic acid or to cause the nucleic acid to precipitate,
 - b) incubating the aqueous solution of step a) to allow the particles of step a) and the biopolymer-nucleic acid of step a) to form a complex adhere, reversibly bind or absorb to the particles of step (a),
 - c) applying a magnetic field to said solution to separate the magnetic particles from said solution, and
 - d) optionally washing the separated magnetic particles of step c); and
 - e) exposing the magnetic particles from step (c) or (d) to an elution buffer under conditions in which said biopolymer-nucleic acid is eluted from said magnetic particles,
wherein no substantial clustering of said magnetic particles in the presence of the aqueous solution or hydratable additive occurs during the performance of the method.
2. (Canceled).
3. (Currently amended) A method according to claim 21, wherein the nucleic acid is DNA, RNA or hybrid molecules of RNA and DNA.
4. (Canceled).

5. (Original) A method according to claim 41, wherein the silica-coated magnetic particles are siliceous- oxide coated magnetic particles.
6. (Original) A method according to claim 1, wherein the salt is a chaotropic salt.
7. (Currently amended) A method according to claim 6, wherein the chaotropic salt is selected from the group consisting of guanidine isothiocyanate, guanidine thiocyanate, guanidine hydrochloride, sodium iodide, potassium iodide, lithium chloride, sodium perchlorate, sodium trichloroacetate ~~or~~ and a mixture thereof.
8. (Currently amended) A method according to claim 7, wherein the chaotropic salt is selected from the group consisting of guanidine isothiocyanate, guanidine thiocyanate, guanidine hydrochloride ~~or~~ and a mixture thereof.
9. (Original) A method according to claim 1, wherein the salt is a non-chaotropic salt.
10. (Currently amended) A method according to claim 9, wherein the non-chaotropic salt is selected from the group consisting of sodium chloride, potassium chloride, ammonium chloride, calcium chloride, magnesium chloride ~~or~~ and a mixture thereof.
11. (Previously presented) A method according to claim 1, wherein the concentration of the salt in the aqueous solution of step a) is in a range of from 0.1 M to 10 M.
12. (Canceled).
13. (Original) A method according to claim 12, wherein the polyalkylene glycol is polyethylene glycol, polypropylene glycol or a mixture thereof.
14. (Original) A method according to claim 13, wherein the polyalkylene glycol is polyethylene glycol.
15. (Original) A method according to claim 14, wherein the polyethylene glycol has a molecular weight in a range of from about 4000 g/mol to about 12000 g/mol.

16. (Original) A method according to claim 15, wherein the polyethylene glycol has a molecular weight in a range of from about 6000 g/mol to about 10000 g/mol.
17. (Original) A method according to claim 16, wherein the polyethylene glycol has a molecular weight of about 8000 g/mol.
18. (Previously presented) A method according to claim 1, wherein the concentration of the additive in the aqueous solution of step a) is in a range of from 2% (w/v) to 7% (w/v).
19. (Original) A method according to claim 18, wherein the concentration of the additive in the aqueous solution of step a) is in a range of from 3% (w/v) to 6% (w/v).
20. (Original) A method according to claim 19, wherein the concentration of the additive in the aqueous solution of step a) is in a range of from 3% (w/v) to 5% (w/v).
21. (Currently amended) A method according to claim 20, wherein the concentration of the additive in the aqueous solution of step a) is in a range of from 3% (w/v) to ~~4.8%~~4.8% (w/v).
22. (Original) A method according to claim 1, wherein the incubation in step b) is performed at room temperature for at least 30 seconds.
23. (Currently amended) A method according to claim 1, further comprising the step of washing said magnetic particles at least once following step c) and prior to step d), under conditions in which the ~~biopolymer~~nucleic acid remains in the complex formed with said magnetic particles in step b).
24. (Currently amended) A method according to claim 1, wherein the method for isolating a ~~biopolymer~~nucleic acid from a solution utilizing magnetic particles is an automated process.
- Claims 25-28 (Canceled).
29. (Currently amended) A kit for performing a method according to claim 1, the kit comprising at least :

a) an aliquot of silica-coated magnetic particles suspended in an aqueous solution in a first container,

b) a hydratable additive, a stock solution of a hydratable additive or a ready-to-use solution of a hydratable additive, wherein said hydratable additive is selected from the group consisting of ethylene glycol, tetraethylene glycol, polyalkylene glycol, cyclodextrin, carageenan, dextran, dextran sulfate, xanthan, cellulose, hydroxypropyl cellulose, amylase, 2-hydroxypropyl- β -cyclodextrin, Agar Agar or a mixture thereof, and/or

c) a chaotropic or a non-chaotropic salt, a stock solution of a chaotropic or a non-chaotropic salt or a ready-to-use solution of a chaotropic or non-chaotropic salt.

30. (Previously presented) The kit of claim 29, further comprising:

a) an additive selected from the group consisting of ethylene glycol, polyalkylene glycol, cyclodextrin, carrageenan, dextran, dextran sulfate, xanthan, cellulose, hydroxypropyl cellulose, amylose, 2-hydroxypropyl-B-cyclodextrin, Agar Agar, glycerol, polyvinyl alcohol or a mixture thereof, a stock solution of said additive or a ready-to-use solution of said additive in a container, and/or

b) a chaotropic salt, a stock solution of said salt or a ready-to-use solution of said salt in a container.

31. (Canceled).

32. (Currently amended) The kit of claim 31, wherein the silica-coated magnetic particles are siliceous-oxide coated magnetic particles.